



Tommy Rockward is currently a Research Scientist in the Materials, Physics, and Applications Group at Los Alamos National Laboratory. He received his B.S in Physics in 1994 and M.S. in Applied Physics from Southern University in December, 1998. His theses focused on optimizing polymer electrolyte membrane fuel cell performance in the presence of reformat gas. His work has continued over 15 years at LANL and expanded to include cathodes and contaminants issues. He has actively participated in the USFCC Materials and Components Working Group to establish a standardized testing protocol for fuel cells.

Tommy served as the U.S. international representative to establish a hydrogen fuel standard for the Department of Energy's Safety, Codes, and Standards sub-program. Tommy is responsible for conducting experiments and with different contaminants to probe their impact on an operating fuel cell using various operating conditions. To date, Tommy has disseminated results to a broad audience that included collaborators such as Japan, Korea, Germany, and France to name a few. His efforts were instrumental in developing an international hydrogen fuel quality standard.

In addition, Tommy also served as sub-committee chair for the ASTM D03.14 group. This group was formed to establish standard test methods to detect trace contaminants in gaseous hydrogen fuel for the DOE's Safety, Codes, and Standards Program. More recently, Tommy led a successful effort to launch a new collaboration with Minority Serving Institutes (MSI) that includes Southern University A. & M. (Baton Rouge), Allen University, Prairie View A. & M., Tennessee State University, and Morehouse College, Tuskegee University, Benedict College, and Florida A. & M. University. Tommy expects that this effort will help improve the core capabilities at each institute both experimentally and analytically. This will hopefully improve students' employment opportunities at National Laboratories. Tommy has co-authored several publications and received three patents (Non-Aqueous Liquid Compositions Comprising Ion Exchange Polymers in July 2011 and Non-Aqueous Liquid Compositions Comprising Ion Exchange Polymers Reference to Related Applications in August 2012) as well as a more recent patent, Hydrogen Fuel Quality Analyzer with Self-Humidifying Electrochemical Cell and Methods of Fuel Cell Testing (November 2016).